"Stack Unique Signatures for Program Procedures and Methods"

ABSTRACT OF THE DISCLOSURE

[0047]   A system and method for inserting stack signature marking segments into application program modules at the entry and exit points of the application program

5   segments prior to compilations.   Unique module identifier values are assigned to each application program module. During execution of the modified application software modules, upon entry into a new module or instance of a module, the unique module identifier is pushed onto the stack along with an instance number and an entry indicator.   Upon termination of the module or instance of a module, the unique

10   module identifier is pushed onto the stack with the instance number and an exit indicator, thereby placing an entry signature and an exit signature onto the stack bracketing the stack frame assigned to that module or module instance.   During debug of exceptions, these signatures may be used to locate and identify stack frames and their associated software modules.